



## Course Specification of Pharmaceutical Care (I)

I. Course Identification and General Information:						
1	Course Title:	Pharmaceutical Care (1)				
2	Course Number & Code:	Ph256				
3	Credit hours: 2hrs	C.H				Total
		Theoretical	Practical	Training	Seminar	
		1	2	-	-	2
4	Study level/ semester at which this course is offered:	Third year, First Semester				
5	Pre –requisite (if any):					
6	Co –requisite (if any):					
7	Program (s) in which the course is offered:	Bachelor of Pharmacy				
7	Department (s) in which the course is offered:	Pharmaceutics and Industrial Pharmacy				
8	Language of teaching the course:	English				
9	Location of teaching the course:	Faculty of pharmacy – Sana'a University				
10	Prepared by:	Prof. Dr. Ahmed Mohamed Sabati				
11	Date of approval:					

### I. Course Description:

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This course aims to provide the students with the fundamental aspects of pharmaceutical care and its processes and plans. It focus on role of pharmacists and patients, medication review, medication reconciliation, patient interview and communication as well as interprofessional communication and drug-related problems and their roles in of pharmaceutical care. The quality control and pharmaceutical care around the World are

demonstrated.

**At the end of this course, the students will be able to:**

1. Describe the fundamental aspect and objectives of pharmaceutical care as well as the role of pharmacists in improving health outcomes.
2. Demonstrate the professionalism of the Pharmacists in pharmacy practice and their role in identification and prevention or resolving of drug-related problems
3. Recognize the different skills for patient interview and communication.
4. Describe the role of the patient in the pharmaceutical care process to develop person-centered pharmaceutical care through patient counseling, instructing and increasing health literacy.
5. Describe the process of documentation, medication review, medication reconciliation and quality control in pharmaceutical care in reference to pharmaceutical care in some countries.
6. Focus on medication reconciliation, review and interprofessional communication as an essential part of pharmaceutical care
7. Discuss the quality control in pharmaceutical care including the development and validation of guidelines and protocols used in practice.
8. Differentiate and apply different skills for patient interview and communication.
9. Explore the pharmaceutical care processes and strategies to optimize medicines use and improve health outcomes.
10. Provide patient-oriented pharmaceutical care with other health care practitioner.
11. Practice the plan of pharmaceutical care to optimize medicines use and improve health outcomes.
12. Employ the relevance and practical utility needed for the implementation of pharmaceutical care at various levels and within different health care systems.
13. Perform pharmaceutical care activities such as writing reports, documentation and presentation skills.
14. Implement patient interview by applying the communication skills as a part of pharmaceutical care practice.

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15. Communicate and cooperate effectively with his colleagues and other practitioners in different settings when incorporating pharmaceutical care in their practice.
16. Explore and use internet resources to search for up-to-date information in the areas of pharmaceutical care researches to solve emerging problems.

### III. Intended learning outcomes (ILOs) of the course:

#### (A) Knowledge and Understanding:

Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in Knowledge and

Understanding.		Understanding.	
Program Intended Learning Outcomes (Sub-PILOs) in: Knowledge and Understanding		Course Intended Learning Outcomes (CILOs) in: Knowledge and Understanding	
After completing this program, students will be able to:		After completing this course, students will be able to:	
A1-	Recognize the principles of social, behavioral, health and, pharmaceutical sciences.	a1-	Describe the fundamental aspect and objectives of pharmaceutical care as well as the role of pharmacists in improving health outcomes.
A3-	Describe the general cellular, biochemical and physiological aspects of human body and recognize the pharmacokinetics, pharmacodynamics, disease pathophysiology, and pharmacogenetic of therapeutic agents to provide pharmaceutical care and facilitate management of patient's medication, rationalize drug use and overall health needs	a2-	Demonstrate the professionalism of the Pharmacists in pharmacy practice and their role in identification and prevention or resolving of drug-related problems.
A5	Demonstrate the basic knowledge of pharmacoeconomics, pharmacovigilance, policy, legislation, marketing, administration and distribution of pharmaceutical and cosmetic products as well as ethics of health care.	a3-	Recognize the different skills for patient interview and communication.
		a4-	Describe the role of the patient in the pharmaceutical care process to develop person-centered pharmaceutical care through patient counseling, instructing and increasing health literacy.
		a5-	Describe the process of documentation, medication review, medication reconciliation and quality control in pharmaceutical care in reference to pharmaceutical care in some countries.

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Teaching And Assessment Methods For Achieving Learning Outcomes:		
Alignment of Learning Outcomes of Knowledge and Understanding to Teaching and Assessment Methods:		
Course Intended Learning Outcomes (CILOs) in Knowledge and Understanding	Teaching strategies/methods to be used	Methods of assessment
completing this course, students will be able to:		
a1- Describe the fundamental aspect and objectives of pharmaceutical care as well as the role of pharmacists in improving health outcomes.	Lectures methods , Computer based teaching and learning, group discussion and tutorial	Oral Exam, Quizzes, Attendance, Participation, Short answers, reports,
a2- Demonstrate the professionalism of the Pharmacists in pharmacy practice and their role in identification and prevention or resolving of drugrelated problems		homework, and Written exam.
a3- Recognize the different skills for patient interview and communication.		
a4- Describe the role of the patient in the pharmaceutical care process to develop personcentered pharmaceutical care through patient counseling, instructing and increasing health literacy.		
a5- Describe the process of documentation, medication review, medication reconciliation and quality control in pharmaceutical care in reference to pharmaceutical care in some countries.		
(B) Intellectual Skills:		
Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: Intellectual skills		
Program Intended Learning Outcomes (Sub-PILOs) in Intellectual skills	Course Intended Learning Outcomes (CILOs) of Intellectual Skills	
After completing this program, students will be able to:	After completing this course, students will be able to:	

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<b>B5-</b>	Interpret the prescriptions, patient and clinical data, Analysis all the encountered pharmaceutical problems and plan the strategies for their solution, to develop the health care.	<b>b1-</b>	Explore the pharmaceutical care processes and strategies to optimize medicines use and improve health outcomes.
		<b>b2-</b>	Differentiate and apply different skills for patient interview and communication.
		<b>b3-</b>	Discuss the quality control in pharmaceutical care including the development and validation of guidelines and protocols used in practice.
		<b>b4-</b>	Focus on medication reconciliation, review and interprofessional communication as an essential part of pharmaceutical care

### Teaching And Assessment Methods For Achieving Learning Outcomes:

#### Alignment of Learning Outcomes of Intellectual Skills to Teaching Methods and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Intellectual Skills.		Teaching strategies/methods to be used	Methods of assessment
After completing this course, students will be able to:		Lectures methods, Group Discussion, Problem solving sessions, brainstorming and Computer based teaching and learning	Oral Exam, Quizzes, Attendance, Participation, Short answers, reports, homework, and Written exam.
<b>b1-</b>	Explore the pharmaceutical care processes and strategies to optimize medicines use and improve health outcomes.		
<b>b2-</b>	Differentiate and apply different skills for patient interview and communication.		
<b>b3-</b>	Discuss the quality control in pharmaceutical care including the development and validation of guidelines and protocols used in practice.		
<b>b4-</b>	Focus on medication reconciliation, review and interprofessional communication as an essential part of pharmaceutical care		

### (C) Professional and Practical Skills:

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Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: Professional and Practical Skills			
Program Intended Learning Outcomes (Sub-PILOs) in Professional and Practical Skills		Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills	
After completing this program, students will be able to:		After completing this course, students will be able to:	
C4-	Provide patient-oriented pharmaceutical care by collaboration with other health care professionals to optimize therapeutic outcomes.	c1-	Provide patient-oriented pharmaceutical care with other health care practitioner.
C5-	Conduct research studies and utilize the results in different pharmaceutical fields.	c2-	Practice the plan of pharmaceutical care to optimize medicines use and improve health outcomes.
		c3-	Employ the relevance and practical utility needed for the implementation of pharmaceutical care at various levels and within different health care systems.
		c4-	Perform pharmaceutical care activities such as writing reports, documentation and presentation skills.
Teaching And Assessment Methods For Achieving Learning Outcomes:			
Alignment of Learning Outcomes of Professional and Practical Skills to Teaching and Assessment Methods:			
Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills		Teaching strategies/methods to be used	Methods of assessment
After completing this course, students will be able to:		Lectures methods Practical session, brainstorming and group discussion	Practical works, homework, practical exam and practical reports.
c1-	Provide patient-oriented pharmaceutical care with other health care practitioner.		
c2-	Practice the plan of pharmaceutical care to optimize medicines use and improve health outcomes.		

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c3-	Employ the relevance and practical utility needed for the implementation of pharmaceutical care at various levels and within different health care systems.		
c4-	Perform pharmaceutical care activities such as writing reports, documentation and presentation skills.		

### (D) General / Transferable Skills:

Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: **General and Transferable skills**

Program Intended Learning Outcomes (PILOs) in General / Transferable skills		Course Intended Learning Outcomes (CILOs) in General / Transferable skills	
After completing this program, students will be able to:		After completing this course, students will be able to:	
D1-	Practice independent learning needed for continuous professional development	d1-	Implement patient interview by applying the communication skills as a part of pharmaceutical care practice.
D4	Take responsibility for adaptation to change needs in pharmacy practice.	d2	Communicate and cooperate effectively with his colleagues and other practitioners in different settings when incorporating pharmaceutical care in their practice.
D5-	Apply information and communication technology and working effectively in a team.	d3	Explore and use internet resources to search for up-to-date information in the areas of pharmaceutical care researches to solve emerging problems.

### Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment of Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in General and Transferable Skills	Teaching strategies/methods to be used	Methods of assessment
After completing this course, students will be able to:		Homework and reports.

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d1-	Implement patient interview by applying the communication skills as a part of pharmaceutical care practice.	Small group discussions, Tutorials and Practical session	
d2	Communicate and cooperate effectively with his colleagues and other practitioners in different settings when incorporating pharmaceutical care in their practice.		
d3	Explore and use internet resources to search for up-to-date information in the areas of pharmaceutical care researches to solve emerging problems.		

#### IV. Course Content:

##### 1 – Course Topics/Items:

##### a – Theoretical Aspect

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Order	Topic List / Units	CILOs (symbols)	No. of /week	No. of Hours
1	Definition of Pharmaceutical Care and Related Concepts	a1, b1, d2-3	1	1
2	Pharmaceutical Care and the Role of Drug-Related Problems, Professionalism of the Pharmacists	a2, b2, d2-3	1	1
3	Pharmaceutical Care Processes, The general role of the pharmacist Pharmaceutical Care and the Role of the Patient	a1, a4, b1-3, d23	1	1
4	Pharmaceutical Care and Patient Counseling	a4, b1-3, d1-3	1	1
5	Patient interview and communication skills	a3, b2, d1-3	1	1
6	The Role of Inter professional Communication in Pharmaceutical Care	a3, b4, d1-3	1	1
7	Mid Term Exam	a1-4, b1-4	1	
8	Medication Review and Medication Reconciliation, Data collection , Problem History analysis	a5, b4, d1-3	1	1
9	Documenting Pharmaceutical Care, Patient information analysis	a5, b2, d1-3	1	1
10	Quality Control in Pharmaceutical Care: Guidelines and Protocols	a5, b3, d1-3	1	1
11	The Role of Core Outcome Sets for Pharmaceutical Care Research	a1, b3, d1-3	1	1
12	Pharmaceutical Care Around the World	a5, b3, d1-3	4	4
13	Final Term Exam	a1-5, b1-b4,	1	1

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Number of Weeks /and Units Per Semester

16

16

## I. Course Content:

### 1 – Course Topics/Items:

#### b – Practical Aspect

Order	Practical Task	CILOs (symbols)	No. of /week	No. of Hours
1	Introduction to care planning, observation, discussion and reflection on pharmaceutical care practice	c1-c4,d1-d3	1	2
2	Report: Care planning, observation, discussion, and reflection on the role of Drug-Related Problems in pharmaceutical care practice.	c1-c4,d1-d3	1	2
3	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice Pharmaceutical Care and the Role of the Patient	c1-c2,d1-d3	1	2
4	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice Pharmaceutical Care and Patient Counseling	c1-c4,d1-d3	1	2
5	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice -The Role	c1-c4,d1-d3	1	2

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	of Adherence in Pharmaceutical Care			
6	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice -The Role of Interprofessional Communication in Pharmaceutical Care	c1-c4,d1-d3	1	2
7	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice - Medication Review and Medication Reconciliation	c1-c4,d1-d3	1	2
8	Mid Term Exam	c1-c4,d1-d3	1	2
9	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice - Documenting Pharmaceutical Care	c1-c4,d1-d3	1	2
10	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice -Quality Control in Pharmaceutical Care: Guidelines and Protocols	c1-c4,d1-d3	1	2
11	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice -The Role of Core Outcome Sets for Pharmaceutical Care Research	c1-c4,d1-d3	1	2
12	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice Pharmaceutical Care Around the World	c1-c4,d1-d3	4	8

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13	Final Term Exam	c1-c4,d1-d3	1	2
Number of Weeks /and Units Per Semester			16	32

### I- Teaching strategies of the course:

Lectures using data show video animation, brainstorming, case study, Practice session, Discussions, Small group discussions, Tutorials and Practical classes

### II- Assignments:

- Homework
- Reports

### III- Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes (CILOs symbols)
1	Attendance, Participation, reports and quizzes	All Weeks	5	5%	a1,a3 ,b1,b4, d1-3
	Oral Tests and Homework assignments	Sporadic through the semester	5	5%	a2, a4, a5, b1-3, d1-3
2	Attendance, Practical Reports and Practical mid-semester exam	8 <sup>th</sup>	30	30%	c1-4, d1-3

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3	Theoretical mid-semester exam	7 <sup>th</sup>	20	20%	a1-3, b1, b2
5	Final Exam (theoretical)	16 <sup>th</sup>	30	30%	a1-5, b1-4
6	Final Exam (practical)	16 <sup>th</sup>	20	20%	c1-4, d1-3
<b>Total</b>			<b>100</b>	<b>100%</b>	

## II. Students' Support:

Office Hours/week	Other Procedures (if any)
2 hours	-

## III. Learning Resource (MLA style or APA style)S:

### 1- Required Textbook(s) ( maximum two )

Filipa Alves da Costa, J. W. Foppe Van Mil and Aldo Alvarez-Risco, (2019), The Pharmacist Guide to Implementing Pharmaceutical Care, Springer, Switzerland.

### 2- Recommended Readings and Reference Materials

Cipolle RJ, Strand LM, Morley PC (2007), Pharmaceutical care practice: the clinician`s guide, 2<sup>nd</sup> edition, McGraw-Hill, New York.

### 3- Essential References

Course notes (lecture notes and practical notes) prepared by teacher of the subject.

### 4- Electronic Materials and Web Sites etc.

Websites in international network (internet)

### 5- Other Learning Material:

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#### IV- Facilities Required:

<b>1 - Accommodation:</b>	<ul style="list-style-type: none"><li>- Well-equipped lecture halls with data show facilities, whiteboards, net connection, etc.</li><li>- Well-equipped laboratories with all required equipment and reagents.</li></ul>
<b>2 - Computing resources:</b>	<ul style="list-style-type: none"><li>- Computer laboratory with internet facilities.</li></ul>

#### V- Course Improvement Processes:

##### 1- Strategies for obtaining student feedback on effectiveness of teaching

- Student-based assessment of the effectiveness of teaching using a questionnaire designed by the Quality Assurance Unit at the end of the semester.
- Meeting with students and faculty (once per semester).

##### 2- Other strategies for evaluation of teaching by the instructor or by the department.

- Assessment of the course syllabus and contents by the teachers using a questionnaire designed by the Quality Assurance Unit of the university at the end of the semester.
- Regular meeting and discussion of the course content between the Head of Department and the teaching staff of the course (for theory and practice).

##### 3- Processes for improvement of teaching.

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	<ul style="list-style-type: none"> <li>Revision of the course specification and its teaching strategies every three academic years after consideration of all issues raised by the teachers and/or students during regular meetings and discussions.</li> <li>Exploring any possible defects in the course that might be encountered by the teaching staff and their mitigation in subsequent improved versions of course specification.</li> </ul>
<b>4- Processes for verifying standards of students' achievement</b>	
	<ul style="list-style-type: none"> <li>Checking of a sample of students' work by an independent faculty member.</li> <li>Periodic exchange and check marking of a sample of students' assignments with a faculty member from another institution.</li> <li>Adoption of scoring rubrics to assess the students' achievement (both for ongoing or summative assessments).</li> <li>Regular follow-up of laboratory logbooks to assess the practical achievement of students.</li> </ul>
<b>5- Procedures for periodically reviewing of course effectiveness and planning for improvement</b>	
	<ul style="list-style-type: none"> <li>Student rating and feedback</li> <li>Peer rating and feedback</li> </ul>
	<ul style="list-style-type: none"> <li>Regular meeting of the Curriculum Committee of the faculty.</li> </ul>
<b>6- Course development plans</b>	
	<ul style="list-style-type: none"> <li>Conducting regular workshops for the staff for improving their course specification skills.</li> <li>Regular revision of course specification and syllabus items.</li> </ul>

#### VI- Course Policies: (including plagiarism, academic honesty, attendance etc)

The University Regulations on academic misconduct will be strictly enforced. Please refer to -----

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1	<b>Class Attendance:</b> - Attendance in all lectures and practical classes are required, except in very emergency circumstances, such as serious illness or death in the family with providing an acceptable documentation approved the university and forwarded by the chairman of the department. Otherwise the absence shall be considered unexcused. -In accordance with the university rules, if the percentage of student's absentness exceeds 25 % of the total lectures or practical classes, the student involved shall be disqualified in the final written and practical examination of the course and shall be deemed to have failed in the course.
2	<b>Tardy:</b> - Roll will be called in the very beginning of each lecture and practical class. Retardation for more than three weeks without a reasonable excursion, the student involved shall not be allowed to attend the class any longer and consequently shall be considered to be absent.
3	<b>Exam Attendance/Punctuality:</b> - It is incumbent on student to report at the examination hall for checking in and rolls calling at least 15 minutes before the commencement of examination. -A student is not allowed to submit answer booklet and leave the examination hall only on or after the passage of the have examination duration (equivalent to the first one hour after the commencement of the examination). -A student who comes late shall not be admitted to the examination hall, only within the first one hour of
	the examination. Attending after this time, the student will be considered to be missed in the examination and shall be deemed to have failed in the course. When a student misses the final examination due to a legitimate medical problems or death in the family, an acceptable documentation approved by the university medical unit for the excused absentness (hospitals medical reports along with discharge summaries or death certificate) must be provided no later than three weeks and consequently the student shall be disqualified in the examination but with the excused absentness.

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4	<p><b>Assignments &amp; Projects:</b></p> <p>- Micro-assignments and practical reports must be submitted for the assessment on or before the due date. If a student does not submit the micro-assignments or practical reports, the student shall be allotted zero marks which will affect the final assessment of the course.</p> <p>-The submission date extension will not be granted only by the consent of the faculty member concerned.</p> <p>In the case of late submission, the student must provide a reasonable explanation to the faculty member. Otherwise 1% of the obtained marks will be subtracted for each late day, including weekends and holidays.</p>
5	<p><b>Cheating:</b></p> <p>-If a student is found cheating in the final and med-term examinations and quizzes(copying from un authorized materials and anther students' work or allowing other students to copy from his/her own work), the student involved shall be disqualified in the examination and shall be deemed to have failed in the course and also suspended from examinations of two more courses.</p> <p>If a student if found engaging in any unauthorized communications (oral,sign,call,etc.), while the examination is in progress or in possessing of any authorized materials or electronic devices before the distribution of examination papers , the student involved shall be disqualified in the examination and shall be deemed to have failed the course.</p>
6	<p><b>Plagiarism:</b></p> <ul style="list-style-type: none"><li>Plagiarism is the presentation of any material (text, data or figures) from any other source in preparation of micro-assignments or practical reports without clear and adequate acknowledgement of the source.</li><li>Plagiarism is also the use or copy of other students' work (with, or without payment) to prepare all or part of undertaken micro-assignments or practical reports of work submitted for assessment.</li></ul> <p>All types of plagiarism in are unacceptable and are considered of honest practices. If a student is found using plagiarism in devoted micro-assignments or reports , the student involved shall be subjected to the same penalties as in the case of cheating as already mentioned in the sub-section (5) of the course</p>
	policies.



7	<p><b>Other policies:</b></p> <ul style="list-style-type: none"><li>▪ - Students must switch off their mobile phones, labtops, electronic devices etc. before entering lecture room or laboratory. If a student is found using these devices while the lecture or practical work is in progress, the student involved shall be expelled out of the class and shall be considered to be absent.</li></ul> <p>Note that students can submit their micro-assignments or practical reports through the e-mail address of the faculty member concerned and should be prudent to keep Photostat or electronic copies of submitted works to guard against an accidental loss.</p>
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## Course Plan of Pharmaceutical Care (I)

I- Information about Faculty Member Responsible for the Course:						
Name of Faculty Member	Prof. Dr. Ahmed Mohamed Sabati	<b>Office Hours</b>				
Location & Telephone No.		SAT	SUN	MON	TUE	WED
E-mail						

II- Course Identification and General Information:						
1-	Course Title:	Pharmaceutical Care (I)				
2-	Course Number & Code:	Ph256				
3-	Credit hours:	<b>C.H</b>				<b>Total</b>
		Th.	Seminar	Pr.	F. Tr.	
		1	-	2	2	
4-	Study level/year at which this course is offered:	Third year, First Semester				
5-	Pre –requisite (if any):					
6-	Co –requisite (if any):	-				
7-	Program (s) in which the course is offered	Bachelor of Pharmacy				

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8-	Language of teaching the course:	English
9-	System of Study:	Semesters
10-	Mode of delivery:	Regular
11-	Location of teaching the course:	Faculty of Pharmacy- Sana`a university

### III- Course Description:

This course aims to provide the students with the fundamental aspects of pharmaceutical care and its processes and plans. It focus on role of pharmacists and patients, medication review, medication reconciliation, patient interview and communication as well as interprofessional communication and drug-related problems and their roles in of pharmaceutical care. The quality control and pharmaceutical care around the World are demonstrated.

### IV- Intended learning outcomes (ILOs) of the course:

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**At the end of this course, the students will be able to:**

1. Describe the fundamental aspect and objectives of pharmaceutical care as well as the role of pharmacists in improving health outcomes.
2. Demonstrate the professionalism of the Pharmacists in pharmacy practice and their role in identification and prevention or resolving of drug-related problems
3. Recognize the different skills for patient interview and communication.
4. Describe the role of the patient in the pharmaceutical care process to develop person-centered pharmaceutical care through patient counseling, instructing and increasing health literacy.
5. Describe the process of documentation, medication review, medication reconciliation and quality control in pharmaceutical care in reference to pharmaceutical care in some countries.
6. Focus on medication reconciliation, review and interprofessional communication as an essential part of pharmaceutical care
7. Discuss the quality control in pharmaceutical care including the development and validation of guidelines and protocols used in practice.
8. Differentiate and apply different skills for patient interview and communication.
9. Explore the pharmaceutical care processes and strategies to optimize medicines use and improve health outcomes.
10. Provide patient-oriented pharmaceutical care with other health care practitioner.
11. Practice the plan of pharmaceutical care to optimize medicines use and improve health outcomes.
12. Employ the relevance and practical utility needed for the implementation of pharmaceutical care at various levels and within different health care systems.
13. Perform pharmaceutical care activities such as writing reports, documentation and presentation skills.
14. Implement patient interview by applying the communication skills as a part of pharmaceutical care practice.
15. Communicate and cooperate effectively with his colleagues and other practitioners in different settings when incorporating pharmaceutical care in their practice.
16. Explore and use internet resources to search for up-to-date information in the areas of pharmaceutical care researches to solve emerging problems.

#### IV. Course Content:

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سباتي	ا.د. محمود البريهي	ا.د. ماجد علوان	د. خالد الشوية	ا.م.د. هدى العماد	ا.د. القاسم محمد عباس



## 1 – Course Topics/Items:

### a – Theoretical Aspect

Order	Topic List / Units	CILOs (symbols)	Week Due	No. of Hours
1	Definition of Pharmaceutical Care and Related Concepts	a1, b1, d2-3	1	1
2	Pharmaceutical Care and the Role of Drug-Related Problems, Professionalism of the Pharmacists	a2, b2, d2-3	2	1
3	Pharmaceutical Care Processes, The general role of the pharmacist Pharmaceutical Care and the Role of the Patient	a1, a4, b1-3, d23	3	1
4	Pharmaceutical Care and Patient Counseling	a4, b1-3, d1-3	4	1
5	Patient interview and communication skills	a3, b2, d1-3	5	1
6	The Role of Inter professional Communication in Pharmaceutical Care	a3, b4, d1-3	6	1
7	Mid Term Exam	a1-4, b1-4	7	
8	Medication Review and Medication Reconciliation, Data collection , Problem History analysis	a5, b4, d1-3	8	1
9	Documenting Pharmaceutical Care, Patient information analysis	a5, b2, d1-3	9	1
10	Quality Control in Pharmaceutical Care: Guidelines and Protocols	a5, b3, d1-3	10	1

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11	The Role of Core Outcome Sets for Pharmaceutical Care Research	a1, b3, d1-3	11	1
12	Pharmaceutical Care Around the World	a5, b3, d1-3	12-15	4
13	Final Term Exam	a1-5, b1-b4,	16	1
<b>Number of Weeks /and Units Per Semester</b>			<b>16</b>	<b>16</b>

## V. Course Content:

### 1 – Course Topics/Items:

#### b – Practical Aspect

Order	Practical Task	CILOs (symbols)	Week Due	No. of Hours
1	Introduction to care planning, observation, discussion and reflection on pharmaceutical care practice	c1-c4,d1-d3	1	2
2	Report: Care planning, observation, discussion, and reflection on the role of Drug-Related Problems in pharmaceutical care practice.	c1-c4,d1-d3	2	2
3	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice Pharmaceutical Care and the Role of the Patient	c1-c2,d1-d3	3	2

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4	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice Pharmaceutical Care and Patient Counseling	c1-c4,d1-d3	4	2
5	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice -The Role	c1-c4,d1-d3	5	2

	of Adherence in Pharmaceutical Care			
6	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice -The Role of Interprofessional Communication in Pharmaceutical Care	c1-c4,d1-d3	6	2
7	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice - Medication Review and Medication Reconciliation	c1-c4,d1-d3	7	2
8	Mid Term Exam	c1-c4,d1-d3	8	2
9	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice - Documenting Pharmaceutical Care	c1-c4,d1-d3	9	2
10	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice -Quality Control in Pharmaceutical Care: Guidelines and Protocols	c1-c4,d1-d3	10	2

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11	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice -The Role of Core Outcome Sets for Pharmaceutical Care Research	c1-c4,d1-d3	11	2
12	Report: Care planning, observation, discussion, and reflection on pharmaceutical care practice Pharmaceutical Care Around the World	c1-c4,d1-d3	12-15	8
13	Final Term Exam	c1-c4,d1-d3	16	2
<b>Number of Weeks /and Units Per Semester</b>			<b>16</b>	<b>32</b>

## VI. Teaching strategies of the course:

Lectures using data show video animation, brainstorming, case study, Practice session, Discussions, Small group discussions, Tutorials and Practical classes

## VII. Assignments:

- Homework
- Reports

## VIII. Schedule of Assessment Tasks for Students During the Semester:

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No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes (CILOs symbols)
1	Attendance, Participation, reports and quizzes	All Weeks	5	5%	a1,a3 ,b1,b4, d1-3
	Oral Tests and Homework assignments	Sporadic through the semester	5	5%	a2, a4, a5, b1-3, d1-3
2	Attendance, Practical Reports and Practical mid-semester exam	8 <sup>th</sup>	30	30%	c1-4, d1-3
3	Theoretical mid-semester exam	7 <sup>th</sup>	20	20%	a1-3, b1, b2
5	Final Exam (theoretical)	16 <sup>th</sup>	30	30%	a1-5, b1-4
6	Final Exam (practical)	16 <sup>th</sup>	20	20%	c1-4, d1-3
	<b>Total</b>		<b>100</b>	<b>100%</b>	

### IX. Students' Support:

Office Hours/week	Other Procedures (if any)
2 hours	-

### X. Learning Resource (MLA style or APA style)S:

#### 6- Required Textbook(s) ( maximum two )

Filipa Alves da Costa, J. W. Foppe Van Mil and Aldo Alvarez-Risco, (2019), The Pharmacist Guide to Implementing Pharmaceutical Care, Springer, Switzerland.

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<b>7- Recommended Readings and Reference Materials</b>	
	Cipolle RJ, Strand LM, Morley PC (2007), Pharmaceutical care practice: the clinician`s guide, 2 <sup>nd</sup> edition, McGraw-Hill, New York.
<b>8- Essential References</b>	
	Course notes (lecture notes and practical notes) prepared by teacher of the subject.
<b>9- Electronic Materials and Web Sites etc.</b>	
	Websites in international network (internet)
<b>10- Other Learning Material:</b>	

<b>XI. Facilities Required:</b>	
<b>1 - Accommodation:</b>	- Well-equipped lecture halls with data show facilities, whiteboards, net connection, etc. - Well-equipped laboratories with all required equipment and reagents.
<b>3 - Computing resources:</b>	- Computer laboratory with internet facilities.
<b>XII. Course Improvement Processes:</b>	

<b>6- Strategies for obtaining student feedback on effectiveness of teaching</b>	
	<ul style="list-style-type: none"> <li>Student-based assessment of the effectiveness of teaching using a questionnaire designed by the Quality Assurance Unit at the end of the semester.</li> <li>Meeting with students and faculty (once per semester).</li> </ul>
<b>7- Other strategies for evaluation of teaching by the instructor or by the department.</b>	

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	<ul style="list-style-type: none"> <li>Assessment of the course syllabus and contents by the teachers using a questionnaire designed by the Quality Assurance Unit of the university at the end of the semester.</li> <li>Regular meeting and discussion of the course content between the Head of Department and the teaching staff of the course (for theory and practice).</li> </ul>
<b>8- Processes for improvement of teaching.</b>	
	<ul style="list-style-type: none"> <li>Revision of the course specification and its teaching strategies every three academic years after consideration of all issues raised by the teachers and/or students during regular meetings and discussions.</li> <li>Exploring any possible defects in the course that might be encountered by the teaching staff and their mitigation in subsequent improved versions of course specification.</li> </ul>
<b>9- Processes for verifying standards of students' achievement</b>	
	<ul style="list-style-type: none"> <li>Checking of a sample of students' work by an independent faculty member.</li> <li>Periodic exchange and check marking of a sample of students' assignments with a faculty member from another institution.</li> <li>Adoption of scoring rubrics to assess the students' achievement (both for ongoing or summative assessments).</li> <li>Regular follow-up of laboratory logbooks to assess the practical achievement of students.</li> </ul>
<b>10- Procedures for periodically reviewing of course effectiveness and planning for improvement</b>	
	<ul style="list-style-type: none"> <li>Student rating and feedback</li> <li>Peer rating and feedback</li> <li>Regular meeting of the Curriculum Committee of the faculty.</li> </ul>
<b>6- Course development plans</b>	
	<ul style="list-style-type: none"> <li>Conducting regular workshops for the staff for improving their course specification skills.</li> <li>Regular revision of course specification and syllabus items.</li> </ul>

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### XIII. Course Policies: (including plagiarism, academic honesty, attendance etc)

The University Regulations on academic misconduct will be strictly enforced. Please refer to -----

1	<b>Class Attendance:</b> - Attendance in all lectures and practical classes are required, except in very emergency circumstances, such as serious illness or death in the family with providing an acceptable documentation approved the university and forwarded by the chairman of the department. Otherwise the absence shall be considered unexcused. -In accordance with the university rules, if the percentage of student's absentness exceeds 25 % of the total lectures or practical classes, the student involved shall be disqualified in the final written and practical examination of the course and shall be deemed to have failed in the course.
2	<b>Tardy:</b> - Roll will be called in the very beginning of each lecture and practical class. Retardation for more than three weeks without a reasonable excursion, the student involved shall not be allowed to attend the class any longer and consequently shall be considered to be absent.
3	<b>Exam Attendance/Punctuality:</b> - It is incumbent on student to report at the examination hall for checking in and rolls calling at least 15 minutes before the commencement of examination. -A student is not allowed to submit answer booklet and leave the examination hall only on or after the passage of the have examination duration (equivalent to the first one hour after the commencement of the examination). -A student who comes late shall not be admitted to the examination hall, only within the first one hour of the examination. Attending after this time, the student will be considered to be missed in the examination

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	<p>and shall be deemed to have failed in the course.</p> <p>When a student misses the final examination due to a legitimate medical problems or death in the family, an acceptable documentation approved by the university medical unit for the excused absentness (hospitals medical reports along with discharge summaries or death certificate) must be provided no later than three weeks and consequently the student shall be disqualified in the examination but with the excused absentness.</p>
4	<p><b>Assignments &amp; Projects:</b></p> <p>- Micro-assignments and practical reports must be submitted for the assessment on or before the due date. If a student does not submit the micro-assignments or practical reports, the student shall be allotted zero marks which will affect the final assessment of the course.</p> <p>-The submission date extension will not be granted only by the consent of the faculty member concerned.</p> <p>In the case of late submission, the student must provide a reasonable explanation to the faculty member. Otherwise 1% of the obtained marks will be subtracted for each late day, including weekends and holidays.</p>
5	<p><b>Cheating:</b></p> <p>-If a student is found cheating in the final and med-term examinations and quizzes(copying from un authorized materials and anther students' work or allowing other students to copy from his/her own work), the student involved shall be disqualified in the examination and shall be deemed to have failed in the course and also suspended from examinations of two more courses.</p> <p>If a student if found engaging in any unauthorized communications (oral,sign,call,etc.), while the examination is in progress or in possessing of any authorized materials or electronic devices before the distribution of examination papers , the student involved shall be disqualified in the examination and shall be deemed to have failed the course.</p>

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6	<p><b>Plagiarism:</b></p> <ul style="list-style-type: none"><li>Plagiarism is the presentation of any material (text, data or figures) from any other source in preparation of micro-assignments or practical reports without clear and adequate acknowledgement of the source.</li><li>Plagiarism is also the use or copy of other students' work (with, or without payment) to prepare all or part of undertaken micro-assignments or practical reports of work submitted for assessment.</li></ul> <p>All types of plagiarism in are unacceptable and are considered of honest practices. If a student is found using plagiarism in devoted micro-assignments or reports , the student involved shall be subjected to the same penalties as in the case of cheating as already mentioned in the sub-section (5) of the course policies.</p>
7	<p><b>Other policies:</b></p> <ul style="list-style-type: none"><li>- Students must switch off their mobile phones, labtops, electronic devices etc. before entering lecture room or laboratory. If a student is found using these devices while the lecture or practical work is in progress, the student involved shall be expelled out of the class and shall be considered to be absent.</li></ul> <p>Note that students can submit their micro-assignments or practical reports through the e-mail address of the faculty member concerned and should be prudent to keep Photostat or electronic copies of submitted works to guard against an accidental loss.</p>

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